

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: REDDEN, Robert, F.
Serial No.:
Filed:
Title: PROTEIN TEMPERATURE EVAPORATION CONTROLLED
CRYSTALLIZATION
Group:
Examiner:
Attorney Ref.: PAT 832-2 US

April 15, 2004

Mail Stop DD
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450
U.S.A.

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 , the applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-1449, attached hereto.

II. COPIES

(check at least one box)

- ☐ a. Submitted herewith is a legible copy of (i) each U.S. and foreign patent and application; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☒ b. As this application was filed after June 30, 2003, no U.S. patent or published application copies are enclosed. Where applicable, submitted herewith is a legible copy of (i) each foreign patent or application; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☐ c. Some or all of the documents listed on the PTO-1449 are not

enclosed because they were cited in the International Search Report and copies should already be in the PTO file. If copies are needed, please contact the undersigned.

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

- ☒ a. DOCUMENTS IN THE ENGLISH LANGUAGE
The attached patents, publications, or other information in the English language do not require a statement of relevancy.
- ☐ b. DOCUMENTS NOT IN THE ENGLISH LANGUAGE
A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:
- ☐ c. ENGLISH LANGUAGE SEARCH REPORT
An English language version of the search report or action that indicates the degree of relevance found by the foreign Patent Office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A) (3).
- ☐ d. OTHER
The following additional information is provided for the Examiner's consideration.

IV. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97 (b):
(check one box)

- ☒ a. Within three months of the filing date of a national application (37 C.F.R. § 1.97 (b) (1)). No fee or statement is required. (This section is not to be used with RCE's AND CPA's.)
- ☐ b. Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97 (b) (2)). No fee or statement is required.
- ☐ c. Concurrently with the filing of a Continued Prosecution Application under 37 C.F.R. § 1.53 (d) or concurrently with the filing of a Request for Continued Examination under § 1.114 (37 C.F.R. § 1.97 (b) (4)). No fee or statement is required.
- ☐ d. Before the mailing date of a first Action on the merits (37 C.F.R. § 1.97 (b) (3)). No fee or statement is required. In the event that a first Office

Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97 (e) below, or, if no statement has been made, charge our deposit account in the amount of **\$180.00** as required by 37 C.F.R. § 1.17 (p).

**V. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97 (c):
(check one box)**

- ☐ a. No statement; therefore, a fee in the amount of **\$180.00** as required by 37 C.F.R. § 1.17 (p).
- ☐ b. See the statement below. No fee is required.

**VI. STATEMENT UNDER 37 C.F.R. § 1.97 (e)
(check only one box)**

The undersigned hereby states that

- ☐ a. Each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- ☐ b. No item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of IDS was known to any individual designated in 37 C.F.R. § 1.56 (c) more than three months prior to the filing of the IDS.
- ☐ c. Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application and, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in the 37 C.F.R. § 1.56 (c) more than three months prior to the filing of this statement.

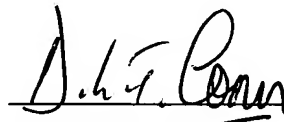
VII. PAYMENT OF FEES
(check one box)

- ☐ A cheque in the amount of **\$180.00** as required by 37 C.F.R § 1.17 (p) is enclosed for the above-identified fee.
- ☐ Please charge Deposit Account No. 501593 in the amount required by 37 C.F.R. § 1.17 (p) for the above-indicated fee. A duplicate copy of this paper is attached.
- ☒ No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 501593.

If the preceding amount is incorrect, any deficiency or overpayment should also be charged or credited to Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.

Respectfully submitted,
Robert F. REDDEN



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DLC/AAB/aab
Encls.

- ☒ PTO-1449
- ☒ Eight References

Form PTO-1449 INFORMATION DISCLOSURE STATEMENT				Complete if Known	
				Application No.:	
				Filing Date:	
				First Named Inventor: Robert F. REDDEN	
				Group Art Unit:	
Examiner Name:					
Sheet	1	of	2	Attorney Docket No.: PAT 832-2	

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Document No.	Date of Publication mm-dd-yyyy	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		6,458,332	10/01/2002	Ooshima et al.	
		6,387,399	05/14/2002	Morrison et al.	
		6,214,300	04/10/2001	Morrison et al.	
		6,103,271	08/15/2000	Morrison et al.	
		6,099,864	08/08/2000	Morrison et al.	
		6,015,104	01/18/2000	Rich, Jr.	
		5,827,531	10/27/1998	Morrison et al.	
		6,406,903	06/18/2002	Bray et al.	
		4,886,646	12/12/1989	Carter et al.	
		4,755,363	07/05/1988	Fujita et al.	
		6,409,832	06/25/2002	Weigl et al.	
		5,643,540	07/01/1997	Carter et al.	
		5,096,676	03/17/1992	McPherson et al.	
		5,130,105	07/14/1992	Carter et al.	
		5,362,325	11/08/1994	Shiraishi et al.	
		5,640,010	06/17/1997	Twerenbold	
		2001/0026 812	10/04/2001	Morrison et al.	
		2001/0006 679	07/05/2001	Morrison et al.	

Examiner Signature:	Date Considered:
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if in conformance and not considered. Include copy of this form with next communication to applicant.	

Form PTO-1449 INFORMATION DISCLOSURE STATEMENT				Complete if Known	
				Application No.:	
				Filing Date:	
				First Named Inventor: Robert F. REDDEN	
				Group Art Unit:	
Examiner Name:					
Sheet	2	of	2	Attorney Docket No.: PAT 832-2	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Patent Document No.	Date of Publication mm-dd-yyyy	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ✓	Check if English Translation is attached
		WO 01/75415 A2	10/11/2001	Micronics, Inc.			
		JP 05115922	11/22/1994	Hitachi Ltd.			

OTHER DOCUMENTS

		Crystal Growth Techniques Data Sheet, <i>Hampton Research</i> .
		Hanging Droplet Method for Protein Crystallization, page 1, http://people.cornell.edu/pages/cmf5/CrystalFold/HangDrop.html .
		NASA Fact Sheet, "Advanced Protein Crystallization Facility (APCF)", http://www1.msfc.nasa.gov/NEWSROOM/background/facts/apcf.html .
		NASA Fact Sheet, "Protein Crystal Growth (PCG) Single-locker Thermal Enclosure System (STES) housing the Protein Crystallization Apparatus for Microgravity (PCAM)", http://www1.msfc.nasa.gov/NEWSROOM/background/facts/pcgstet.html .
		NASA Recommendations, "Future Biotechnology Research on the International Space Station", <i>Executive Summery, National Academy Press</i> , 2000 pp. 1-9.
		NASA, "What is Protein Crystallizaation", " <i>Alabama Space Grant Education Outreach</i> ", http://www.uah.edu/ASGC/educationoutreach/crystallization.htm

Examiner Signature:	Date Considered:
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